

-- ABSTRACT OF THE DISCLOSURE

[The present invention relates] A cell culture apparatus [and a cell culture vessel/roller bottle cap. The apparatus] comprises a rotor releasably housing a plurality of cell culture vessels/roller bottles. The apparatus [has means to allow] provides for rotation of the rotor at a controlled speed about a substantially horizontal axis and [further means to allow] for the rotational axis of [said] the rotor and [said] the bottles housed therein to be tilted to a substantially vertical position in order to allow fluid to be supplied or drain therefrom. Each vessel is provided with a cap equipped with a fluid supply/drain connection arranged at the lowest point of the cap when [said] the vessel is vertically inverted (as shown in Figure 1). The supply/drain connection of each bottle cap is connected to a manifold that allows the supply or extraction of fluid via a sealable external connection. Venting the gas space within the bottle during fluid transfer is provided by [means of] a snorkel tube passing upwards through the fluid, and formed as an internal extension of the bottle cap. The snorkel tube is provided with a micro-porous filter, venting to atmosphere. During cell incubation stages, the assembly of vessels is rotated about a horizontal axis in the known manner. --